

## North American PHEV Demonstration

Fleet Summary Report: Hymotion Prius (V2Green data logger)

Number of vehicles: 172

Reporting Period: Jan 10 - Mar 10

All Trips Combined

All Hips Combined					
Overall gasoline fuel economy (mpg)	47				
Overall AC electrical energy consumption (AC Wh/mi) <sup>1</sup>	54				
Overall DC electrical energy consumption (DC Wh/mi) <sup>2</sup>	40				
Total number of trips	31,852				
Total distance traveled (mi)	303,678				
Trips in Charge Depleting (CD) mode <sup>3</sup>					
Gasoline fuel economy (mpg)	58				
DC electrical energy consumption (DC Wh/mi) <sup>4</sup>	137				
Number of trips	13,439				
Percent of trips city / highway	87% / 13%	,			
Distance traveled (mi)	63,886				
Percent of total distance traveled	21%				
Trips in both Charge Depleting and Charge Sustaining (CD/CS) modes <sup>5</sup>					
Gasoline fuel economy (mpg)	52				
DC electrical energy consumption (DC Wh/mi) <sup>6</sup>	49				
Number of trips	2,333				
Percent of trips city / highway	42% / 59%				
Distance traveled (mi)	69,301				
Percent of total distance traveled	23%				
Trips in Charge Sustaining (CS) mode <sup>7</sup>					
Gasoline fuel economy (mpg)	42				
Number of trips	16,080				
Percent of trips city / highway	78% / 22%				
Distance traveled (mi)	170,490				
Percent of total distance traveled	56%				
Number of trips when the plug-in battery pack was turned off by the vehicle operator <sup>8</sup>	1172				
Distance traveled with plug-in battery pack turned off by the vehicle operator (mi) <sup>9</sup>	14,033				

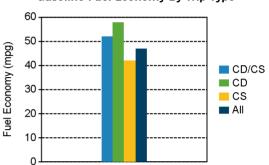
# Vehicle Technologies Program

Date range of data received:

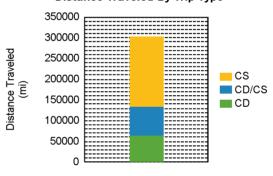
1/1/2010 to 3/31/2010

Number of days the vehicles were driven: 90

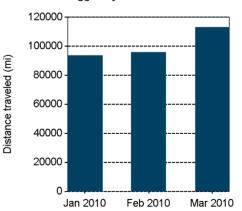
## Gasoline Fuel Economy By Trip Type



## **Distance Traveled By Trip Type**



## Miles Logged by Month This Year

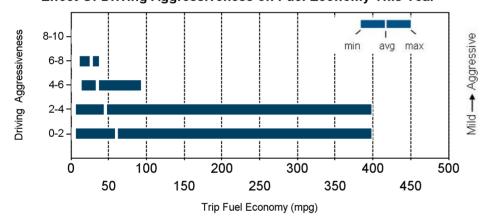


Notes: 1 - 9. Please see http://avt.inel.gov/phev/reportnotes for an explanation of all PHEV Fleet Testing Report notes.

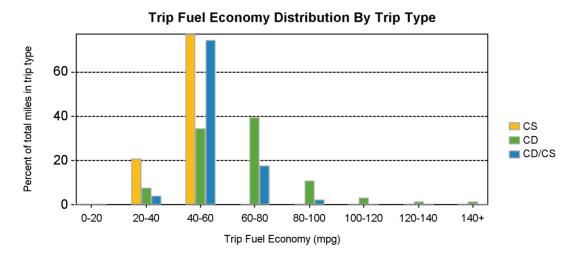
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Trips in Charge Depleting (CD) mode	City	Highway
Gasoline fuel economy (mpg)	55	62
DC electrical energy consumption (DC Wh/mi)	157	108
Percent of miles with internal combustion engine off	27%	17%
Average trip aggressiveness (on scale 0 - 10)	2.0	1.9
Average trip distance (mi)	3.2	14.7
Trips in both Charge Depleting and Charge Sustaining (CD/CS) modes		
Gasoline fuel economy (mpg)	52	52
DC electrical energy consumption (DC Wh/mi)	74	45
Percent of miles with internal combustion engine off	24%	10%
Average trip aggressiveness (on scale 0 - 10)	2.0	1.7
Average trip distance (mi)	9.3	44.1
Trips in Charge Sustaining (CS) mode		
Gasoline fuel economy (mpg)	35	45
Percent of miles with internal combustion engine off	22%	9%
Average trip aggressiveness (on scale 0 - 10)	2.0	1.8
Average trip distance (mi)	3.3	36.1

## **Effect Of Driving Aggressiveness on Fuel Economy This Year**

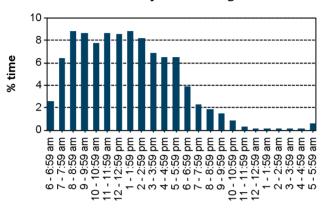


Aggressiveness factor is based on accelerator pedal position. The more time spent during a trip at higher accelerator pedal position, the higher the trip aggressiveness.

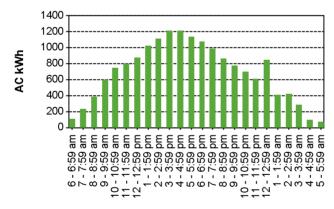


Average number of charging events per vehicle per month when driven	12	
Average number of charging events per vehicle per day when vehicle driven	0.9	
Average distance driven between charging events (mi)	52.0	
Average number of trips between charging events	5.5	
Average time plugged in per charging event (hr)	24.3	
Average time charging per charging event (hr)	2.7	
Average energy per charging event (AC kWh)	2.8	
Average charging energy per vehicle per month (AC kWh)	33.6	
Total number of charging events	5,843	
Total charging energy (AC kWh)	16,530	

## Time of Day When Driving



## Time of Day When Charging



#### Time of Day When Plugging In

